An Inaugural Dissertation

on

Rubeola;

Presented to the Faculty

of the

Homoeopathic Medical College

of

Pennsylvania

for the

Degree of Doctor of Medicine:

by

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Philadelphia, Jan. 30th 1867.

Rubeola.

Synonymae. The word Rubeola seems to be of Spanish origin, being derived from rubeo, "I am red." Another term by which this affection has been designated is Morbilli, the minor plague, from the Italians il morbo, the plague. Ingrassias calls it Blaccia and says: "It is the highest developed form of catarrhal disease of the Respiratory organs on the northern hemisphere." Measles is the common English name for the disease, it is of doubtful origin, probably from the German, Masern.

Notitia Historicum. Willan in his researches into the antiquity of measles thinks that the disease was known to the Greek and

Roman Physicians and that it was seen in Europe during the fifth and sixth centuries. This declaration is doubted by Rayer; in his "Diseases of the Skin" he seems rather to credit the statement of Constantinus Africanus, to wit: that it was first observed in the eleventh century and described under the name of Morbilli. If the miasma or contagion of measles is engendered by catarrh, as was observed by Sydenham and Hildenbrand, it is doubtless much more ancient.

During the 17th. century Small-pox and measles were considered only different degrees of one and the same affection. It was also confounded with Scarlet fever up to the time of F.

Hoffman, he was one of the first to consider measles as: "A particular kind of exanthematous catarrhal fever." Later and more minute investigations have fully demonstrated the distinctions existing between these several diseases.

Stadia. We distinguish four stages in this disease: The catarrhal, the eruptive, the florescent, and the desquamative.

1st. Stadium Catarrhale. During this stage the respiratory mucus membrane over its whole extent exhibits the principal symptoms. Irritation of the nasal mucus membrane and consequently sneezing, is one of the first symptoms; this is accompanied or soon followed by a peculiar, dry and metallic ringing cough, the nose which

was at first dry, now begins to run
a somewhat corroding fluid, the
irritation spreads to the eyes which
become red and sensitive to the light,
by the partial closure of the tear passages
the tears are caused to flow over the
cheeks. This state of things is accom
panied by nightly restlessness and
considerable fever. When the disease
runs through its regular course this
stage lasts three days and is followed
by the

2nd. " <u>Stadium Eruptionis</u>. The first
indications of the approach of this
stage is a suffused turgidity of the
skin of the face, after this has been
present some ten hours the eruption
makes its appearence, first on the
face, extending to the body and

appearing on the extremities last. The exanthem presents a very characteristic form. At first, isolated, bright red spots appear which are soon collected into groups, somewhat crescentic in form, though not exactly defined. The spots are rarely circular, in the center of each a small elevation exists which is more apparent to the touch than the eye. The red color of the eruption disappears on pressure but instantly reappears on its removal, it is a peculiarity of this disease that the redness returns from the center to the periphery, this is reversed in cutaneous affections which similate measles.

The fever reaches its maximum at the end of this stage, which is twenty four hours after its first appearence.

3rd. Stadium Florescentia. On the fifth day the eruption is fully developed. The fever and catarrhal symptoms continue in a modified form, the exacerbations are generally towards evening and the remissions towards morning, even the eruption is pale in the morning and hardly to be seen, while in the evening it is fully developed and red. This Stage lasts three days and is followed by the

4th. Stadium Desquamationis. At the end of the third day of the third stage the eruption loses its bright red color, becomes paler and disappears gradually. The desquamation does, however, not follow immediately but begins after the lapse of a few days and is first seen on those parts on which the eruption first

made its appearence, following the same course as the eruption. It is of a furfuraceous character, with its appearence the fever disappears and the catarrhal symptoms change so that the watery, albuminous expectoration is changed to tough and greenish colored as in the later stages of catarrhal fever. The duration of this stage differs much It lasts from four days to so many weeks and sometimes after an intermision is repeated.

Formae. The nature and character of the accompanying fever as well as the parallel changes with it in the normal course of the eruption gives rise to several easily distinguishable forms of measles. They are the following: Catarrhal,

Inflammatory, Gastric, Typhoid and Maligneut.

1st. Forma Catarrhalis. The character, the mode of appearance, and the course of the eruption is as above described. The fever is moderate, pulse increased in frequency but soft. The temperature of the skin is increased though it is moist towards morning, the urine is somewhat reddened with a mucus sediment in the morning hours, there is no complication

2nd. Forma Inflammatorii. This form of the disease is mostly observed in plethoric individuals and especially during the prevalence of north and north-eastern winds, on the whole more in dry heat and dry cold than in any different state of the

weather. Liable to this form are also children who are teething. The disease begins with violent inflammatory fever the pulse is either full and hard or suppressed, the skin is burning hot, the tongue is redder than usual, some-times swollen, preceding the eruption there is often the most violent conges-tion of blood to the head and chest, which causes violent headache, delerium and convulsions; or great dyspnoea and palpitation of the heart. The eruption follows rapidly in most cases, though it may also be delayed, and in the latter case the patient suffers most. There is generally an irregularity in the appearence of the exanthem, sometimes it appears first on the body and last on the face,

In other cases the eruption is simulta-
neous all over the body. The eruption
is intensely red and the small
points on the spots are very prominent.
the skin between the patches is swollen,
sometimes the face has been seen to
swell which was accompanied by
enormous swelling of the eyelids, and
in adults salivation has even been
observed though in a less degree
than in variola.

The stage of efflorescence is specially
protracted in this form, the desquamation
is often delayed until the 9th — 11th.
day but is then of short duration.
Not unfrequently when internal or-
-gans are much affected the eruption
becomes pale very suddenly or disappears
entirely from the surface, the fever

continues with the same violence, the remissions are very slight and in many instances it takes on a septic character. Generally the bowels are constipated and the urine is small in quantity and voided with difficulty, the patient complains of heat in the mouth and often of a burning pain in the throat though always in a smaller degree than in Scarlet fever. According to Baron inflamation of the bronchia or affections of the brain are especially to be feared, so that a fatal result is brought about by acute Hydrocephalus or by Pneumonia, but an inflammatory condition of the intestinal canal may also endanger life. The affection of the eyes in the form under consideration very often reaches its greatest height.

The attention of the physician is general
-ly directed to the inflammatory condition
of the lungs when the cough is very violent,
protracted, dry and accompanied by
pressure and stitches in the chest,
great dyspnoea, and in rare instances
bloody sputa. Croupy complication
has been observed; sometimes in
the first stages the cough becomes
croupy. this was the case in one
instance which came under the
writers notice, the cough had a
decidedly croupy tone the second day,
it was however promptly relieved by
Belladonna 2c.

Inflammatory affections of the head
may be expected when in the first
stage the mucus membrane of the
nasal cavity is much affected with

only a trifling discharge, when in-
-creasing headache, somnolency, con-
-vulsions or delirium supervene. Fre-
=quently the congestion of the brain
is removed by epistaxis after the
eruption is fully developed.

When the measles are accom=
=panied by violent vomiting, and
colic in the stomach and abdomen,
there is danger, especially in children,
of inflamation of the oesophagus.
Particularly grave is inflamation of
the bowels in this disease; it may
supervene in any stage but is
said to be mostly observed in the
second; a burning skin and ob=
=stinate constipation are generally its
antecedents. In a patient which the
writer treated, in which the eruption

made its appearence in the face only and there but very indifferently, the abdomen began to swell on the 5th. day, it soon became tender to the touch, and was accompanied by constipation and very profuse per=spiration of the head, acid vomiting and restlessness during the latter part of the night, all these symptoms were speedily removed by Calc. 30. and the child recovered. According to some writers colliquative diarrhoea follows the constipation with rapid sinking of strength.

3rd. Forma Gastrica. This com=plication is more frequently observed in summer than in other seasons of the year. It is accompanied by great mucus se=cretions, or more seldom, with great

secretion of bile. With mucus secretions the tongue is coated white especially towards the middle, while the tip and edges are dark red. The cough is in such cases distressing and protracted the eruption is often delayed and irregular.

With a bilious condition the tongue is not so thickly coated and the edges are not so red. Gagging and vomiting may be present, the praecordial regions are swollen and painful, the skin dry and hot, the conjunctiva of the eye often yellow. The gastric complication may become so prominent that the vomiting or diarrhoea continues through all the stages of the disease. Moderately bilious evacuation is a favorable sign.

4th Forma Typhosi. The history of such epidemics shows that the typhoid character of disease was present through gen=
=eral influences before the measles made their appearence and its influence was then exerted on patients who were attacked by measles. This form may however also exhibit itself in sporadic cases even under favorable circumstan=
=ces. The eruption is often preceded by protracted catarrhal difficulties and cough which resembles hooping cough, repeated attacks of chilliness, sometimes very violent alternates with a mild but dry heat which increases after a while. The patient in the beginning complains of great weakness and debility, heaviness of the head and pain in the limbs, restlessness, withered and dry tongue, alternate somnolency

or delerium and often fainting. The erup=
=tion follows such a state very irregularly
and death occurs sometimes even before it
appears. Often the eruption shows itself on the
second day and the more closely the typhoid
character is defined the earlier it appears.
It has been seen to appear suddenly over
the whole body with the most violent
attacks, or it may appear gradually, but
hardly ever does it make its first appearence
on the face and follow its normal
course. The color of the eruption is very
changeable, being often very red then pale,
then red at one place and pale at an
other, often it disappears entirely from the sur=
=face. After the eruption the danger generally
increases and all symptoms are of more
importance especially if it is suppressed.
Bronchitis is apt to associate itself with

this form; this is accompanied by a convulsive cough, great fear and anxiety, and oppression on the chest to the highest degree. Inflamation of the gastro-intestinal mucus membrane is not an unfrequent complication, which is characterized by anxiety in the praecordial regions, pain in the abdomen, increased dry=ness of the tongue, and later diarrhoe, me=teorism or obstinate constipation and vom=iting. With all these affections there is a greater or smaller degree of stupor, death often occurs on the 11th. or 12th. day, when the disease does not prove fatal the des=quamation is generally incomplete, the stage of convalescence is protracted and sequalae are apt to show themselves.

5th. <u>Forma Maligna</u>. Epidemics of this character are rare, sporadic cases are how=ever comparatively more numerous.

the causes of the latter are undoubtedly dyscrasias in the system, else the inflammatory form takes on this character under inefficient treatment; the eruption then becomes dark red or lead colored; the skin may become livid and covered with a viscid perspiration. Petechiae and rash-like eruptions appear. Selle, saw in one instance the skin become so black that the patient resembled a negro. The mouth and fauces are covered with aphtha and ulcers; profuse putrid stools, dysenteric attacks and haemorhages especially from the nose and uterus also belong to its ordinary symptoms. Death is frequently preceded by gangrene of single parts, especially of the genitals.

Aetiologia. The cause of measles rests on a specific poison, miasma, or contagion; which is so subtile an

agent that it escapes all our senses and its form, nature and consistence remains a profound, unsolved problem. This miasma is supposed to be engen=dered by the effluvia from persons suf=fering with catarrh especially when many are crowded in one apartment. [Sydenham, Hildenbrand.] It seems to spread through the medium of the atmosphere. The disease is capable of interrupting some forms of cutaneous diseases, such as are milder than measles. It generally takes on an epidemic form and is more prevalent in northern than in southern countries. Such epidemics are frequently accompa=nied by small pox epidemics or are preceded or followed by an epidemic of hooping cough. One attack insures exemption from future attacks, but

exceptions to this rule are said to have been observed [Watsons practice of Physic 1858—— page 1171.] There is a species of eruption which has been called. Rubeola sine catarrho, and has frequently been observed during epidemics of measles. This eruption resembles genuine measles very closely, but differs from that disease by the absence of all catarrhal symptoms. During the spring of 1866, when measles were prevailing epidemically in some parts of Schuylkill County, Pennsylvania, I had an opportunity to see three cases of this description. The general health of these patients was not disturbed and the cutaneous symptoms were the only ones that could be detected. Two of these patients were subsequently attacked by genuine

measles. This, as well as other similar observations proves, that this eruption affords no protection to attacks of the genuine disease.

Diagnosis. Rubeola has been confounded with Scarlet fever and with Small pox. From the former it differs much in all its stages. The catarrhal symptoms are not so violent, in Scarlet fever, the throat is more affected, the eruption is more diffused, the redness more equally distributed and the desquamation in larger fragments.

The latter resembles it somewhat in the first part of the eruptive stage. The eruptions look considerably alike but feel different to the touch, in Rubeola there are small elevations to be felt in the middle of each spot while in Small pox there are rather

depressions than elevations there is also a disposition of the eruption of Rubeola to cluster which is rarely seen in Small pox so early in this Stage.

A diagnostic sign of importance, because it distinguishes this from all other similar eruptions, is the disposition of the red color of the eruption of Rubeola to return from the center to the periphery when pressure, which is exerted on it, is removed.

Prognosis. This is generally favorable, yet some rare epidemics have been observed wherein the mortality was as great as in Small pox epidemics.

The prognosis of an individual case depends on:

First. The form of the measles, the Typhoid and Malignant being the

worst.

Second, the developement of the eruption and its continuance on the surface. If the eruption is irregularly developed or follows an irregular course the danger is considerably increased.

Third, the age of the patient, the danger being increased by age.

Fourth, the complication, Pneumonia is dangerous. When the disease occurs during dentition, or at the same time with Hooping cough, the danger is also increased.

Therapeutica. All authorities seem to agree that measles in their mildest form seldom require the assistance of art to insure a favorable termination. Such a form is frequently aggravated by the popular

"Sudorifics" which are almost invariably administered "To bring the eruption out."

In the more serious forms, where medical treatment is required, the best success can only be attained by strict individualization, by treating the patient and not the disease.

The patient should be confined to the house from the beginning of the catarhal symptoms, and to bed from the beginning of the eruptive stage to somewhat advanced convalescence. The temperature of the room should be cool but <u>equal</u>, the patient should be lightly covered, drafts of air in the room should be avoided and the light shut out to protect the patients eyes. The remedies most frequently indicated, are: Pulsatilla, Kali bichromicum, Aconitum, Sulphur

and Belladonna; but circumstances may occur under which the following rem=edies must be consulted, Ipecacuanha, Antimonium crudum, Arnica, Dulcamara, Camphora, Carbo vegetabilis, Apis, Bryonia, Phosphorus, Nux vomica, Calcarea carbonica Arsenicum, Mercurius, Rhus toxicodendron, and Phosphoric acid.

By the proper selection of one of these remedies, or any other if indicated, we may expect to keep the disease in its usual bounds, to modify the severity of the symptoms, and to guard against the occurrence of those "Sequalae" which occur so often under "Old School" treat=ment, and which are generally worse than the original disease itself.

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Pottsville, Pa. Sept. 24th, 1866.